

"HOW I FINISH
CYPRESS
"THE WOOD ETERNAL"

FOR
VARIOUS USES
INTERIOR & EXTERIOR,"
BY
GUSTAV STICKLEY
CRAFTSMAN

CYPRESS
POCKET LIBRARY

VOL. 33

THE SULPHURIC ACID TREATMENT



He Who Looks
Before He Leaps
Builds of CYPRESS
and
Builds "For Keeps"



CYPRESS

"AS SIDING, IT PRACTICALLY
WEARS OUT BEFORE IT DECAYS"

—U.S. Govt. Rept., Bulletin 95, Forest Service.

2015.09.01

HOW I FINISH

CYPRESS

(*The Wood Eternal*)

BY

GUSTAV STICKLEY

TREATMENTS HEREIN APPLY TO
BUNGALOW OR COTTAGE
ELABORATE MANOR HOUSE
MODERN APARTMENT
OFFICE *or* PUBLIC BUILDING

Compliments of
SOUTHERN CYPRESS MFRS.
ASSOCIATION, NEW ORLEANS
LA., AND JACKSONVILLE, FLA.

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PUBLIC NOTICE:

How you can be sure that CYPRESS is CYPRESS?

Of course you want Cypress, "the Wood Eternal," for all uses where it represents the highest utility and ECONOMY. But—how are you to know that what you get is Cypress? And, if it *is* Cypress, how can you tell that it is the genuine decay-defying

"TIDE-WATER" CYPRESS?

"TIDE WATER"

CYPRESS MANUFACTURED BY ASSOCIATION MILLS IS NOW



IDENTIFIED BY THIS TRADE-MARK

The **one way** for you to be sure that the Cypress you get was grown in a region near enough to the coast to possess the MAXIMUM of decay-resisting quality is to refuse all but genuine "TIDE-WATER" CYPRESS—and the **only way** to know that you're getting Tide-water Cypress is to insist (and keep on insisting) upon SEEING WITH YOUR OWN EYES the REGISTERED TRADE-MARK of the Southern Cypress Mfrs. Assn., stamped ineradicably in one or both ends of EVERY CYPRESS BOARD OR TIMBER, and on EVERY BUNDLE of "small sticks" such as flooring, siding, moulding and shingles. This is the mark to BUY BY—now that every piece of the TRUE "Wood Eternal" made by a member of the established and ever-watchful Association is at once identified by its maker and "O. K.'d" by the Association mark. "Buy by the Cypress Arrow."

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Did you know that

CYPRESS

**"FINISHED
SUGI"**

IS IDEAL FOR
THE POPULAR

"MISSION"

STYLE OF
INTERIOR TRIM

(Whether Dark, Medium or Light)



Write us for Vol. 26, "the Sugi Book," and Vol. 38, the "home-grown Cypress Furniture Book," with Plans, Detail Sketches, and Full Instructions how to make "furniture you will love as well as use." It is the ideal gift.

WARNING

Mr. Stickley's very effective special treatment of CYPRESS (for both interior and exterior use) is attained by the use of

SULPHURIC ACID

(popularly known as OIL of VITRIOL)

and as this is one of the most powerful caustic or corrosive agents known, we warn that **THE UTMOST CARE MUST BE OBSERVED IN PREPARING, HANDLING AND APPLYING IT,** and none but level-headed, steady-handed grown-ups should be permitted to attempt its use.

See following page—Important

SPECIAL NOTE:

The following is an extract from a letter to the editor of the Cypress Pocket Library from a thoroughly - posted and studious gentleman heavily interested in the cypress industry, whose opinion was valued in the effort to protect the authoritative character of these booklets, and whose prompt reference to a high scientific authority secured the valuable comment on the pages following thereafter:

CYPRESS T H E W O O D E T E R N A L

(COPY OF LETTER)

"After pretty thoroughly going over the Stickley sulphuric acid proposition I submitted the whole thing to Dr. Hermann von Schrenk* in order to have it thoroughly tested out. As a matter of fact I have always been a little bit afraid of a proposition such as this when placed in the hands of amateurs or others who are inexperienced. Mr. Stickley admits that both heat and light have an effect upon this method of finishing, which means that if there is any variation in the heat of a building there may be a difference in the tone of the color effect. There is no room in which there could be wooden finish which does not have more light in certain parts of it than in others, and this also may affect the color. Dr. von Schrenk's reply is enclosed and it thoroughly agrees with the theories I have had."

*(Dr. von Schrenk is probably the best known American authority on the chemistry of woods, and his authoritative counsel is sought

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SPECULATE. USE CYPRESS**

by the most important individuals and corporations in the country when relative values of different species of wood are in debate for special utilities. His scientific pronouncements are therefore valuable because always conservative, cautious and accurate.)

Following is the reply of Dr. von Schrenk:

"St. Louis, Mo., Oct. 14, 1912.

"I am sending you by express today, a certain number of cypress boards treated with sulphuric acid in accordance with your recent request. On a separate sheet you will find an explanation of the numbers, showing what kind of treatment each board received. You will note that there are three lots, one treated when the temperature was about 80 degrees and the other two lots with the temperature about 70. I varied the strength of the sulphuric acid in accordance with the suggestions of Mr. Stickley. Part of the boards were exposed to full sunlight and part of them were kept continuously in the shade . . .

CYPRESS SPECIFY IT- INSIST ON IT

"I will admit that the color of some of the pieces is very good. I am not sure, however, as to its consistency; in other words, how the sulphuric acid *'will continue to work.'* You will also note that those kept in the sun are very much darker than those kept in the shade. This, in the case of a house, would mean that the exposed boards would turn dark and the parts of such boards kept in the shade would be very much lighter in color. One objection which would hold, particularly for inside work, would be the moisture absorbing qualities of boards treated with sulphuric acid. During dry days most of the water would evaporate, leaving a concentrated acid. On a moist day sulphuric acid would absorb considerable quantities of water which might give rise to changes in volume in the boards. Some of the acid is, of course, done away with *as acid by uniting with the wood fiber* but the total disappearance of the acid would probably take a long time. I should not care to make any statement as to the use of this process

"BUILD BUT ONCE"—USE CYPRESS

except of the most guarded character, fully as strong as the statement made in 'The Craftsman Magazine,' advising people of the *very violent corrosive quality of the acid, of the fact that only experienced persons should attempt to handle it, and that great care must be used in all subsequent handling of the boards themselves.* I have not yet tried the shellac which 'The Craftsman' recommends. This may, to a certain extent, obviate the difficulty of subsequent handling. . . ."

Very truly yours,
(Signed) Hermann von Schrenk.

And here follows a subsequent letter to the editor of these booklets after Dr. von Schrenk had made his report:

"I am sending you a sample of CYPRESS finished with the sulphuric acid process, and afterwards waxed. This piece was treated with 11 parts water and one part sulphuric acid, at a temperature of 79 degrees F. This piece was treated on Oct. 11, and

CYPRESS STOPS PROPERTY DEPRECIATION

was left in the sun until Oct. 15. It was obviously set up on one end, so that the acid dried out at the top more rapidly than at the bottom, and one end is slightly darker than the other end. Tests made of identical pieces with the identical strength of acid show slightly darker results in the sun than in the shade, all of which makes it necessary to give anyone intending to use the sulphuric acid treatment to Cypress *sufficient warning as to temperature and light.* This method of finishing CYPRESS for "Craftsman" houses or bungalows will please a great many people but it is so easily possible to botch the whole thing that the Cypress people should be very careful in whatever printed matter they issue on the subject. THIS FINISH CAN BE USED VERY SATISFACTORILY, I SHOULD THINK, ON THE OUTSIDE OF HOUSES WHERE THE SIDING IS PUT ON ROUGH SIDE OUT, AS IT GIVES A DARK BROWN COLOR WHICH IS VERY PLEASING. Where the sun hits it,

THE WOOD CYPRESS THAT LASTS

however, it will get darker than under the eaves and on the shady side of the house, which makes it all more or less a technical proposition to handle."

(This point has been presented to a number of people of high artistic taste and most of them at once remarked that the possible variation suggested by Dr. von Schrenk might well be considered a distinct artistic merit, and an added beauty, even aside from its novelty.)

The matter of taste as well as that of judgment in handling, is therefore presented frankly and scrupulously to the reader.

If well-done — and with due care — the sulphuric acid treatment of Cypress is undoubtedly beautiful, and without a parallel in known wood finishes.

Now for Mr. Stickley's article:

**CYPRESS SPECIFY IT—
INSIST ON IT**

HOW I FINISH CYPRESS

By GUSTAV STICKLEY

In buildings where it seems desirable to show in the wood-work the bold, striking, artistic effects such as we associate with Japanese woods, we can heartily recommend cypress, which is plentiful, easily obtained and not expensive. For bungalows, mountain camps, seaside cottages, country clubs and the like, where strong and somewhat unusual effects are sought for, cypress will be found eminently satisfactory, as it is strong and brilliant as to markings and possesses most interesting possibilities in the way of color.

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**BEST FOR "ALL
OUT-DOORS" CYPRESS**

Cypress is a soft wood belonging to the conifer family and we get most of it from the cypress swamps in the southern states. It is very like the famous Japanese cypress, which gives such a wonderful charm to many of the Japanese buildings and which is so identified with the Japanese use of woods. Over there they bury it for a time in order to get the color quality that is most desired—a soft gray-brown against which the markings stand out strongly and show varying tones. This method, however, did not seem expedient in connection with our own use of the wood and after long experimenting we discovered that we could get

CYPRESS THE WOOD THAT LASTS

good deal of experimenting upon small pieces of wood before attempting to put the acid on the woodwork itself, as it is only by this means that the exact degree of strength required to produce the best effect can be determined. After the application of the acid the wood should be allowed to dry perfectly before putting on the final finish. For interior woodwork this last finish is given by applying one or two coats of wax; for the exterior, one or two coats of raw linseed oil may be used. If the wood threatens to become too dark under the action of the acid, the burning process can be stopped instantly by an application of either oil or wax, so

**"B U I L D B U T
O N C E" — U S E CYPRESS**

that the degree of corrosion is largely under the control of the worker. A white hog's-bristle brush should be used for applying the acid, as any other kind of brush would be eaten up within a short time. Also great care should be taken to avoid getting acid on the face, hands, or clothing.

In connection with the subject of cypress for interior woodwork, we desire to say something concerning its desirability for outside use, such as half-timbering and other exterior woodwork. It is one of the most attractive of all our woods for such use because of its color quality and markings and it has the further advantage of "standing"

CYPRESS SPECIFY IT— INSIST ON IT

well, without either shrinking or swelling. Naturally the sulphuric acid treatment that we have just described applies to this wood whether it is used indoors or out.

Another use of cypress is found in the rived cypress shingle which gives us some of the most interesting effects in exterior wall surfaces. These shingles are the product of one of our few remaining handicrafts, and our sole source of supply depends upon the negroes in the southern swamps. These negroes are adepts at splitting or riving shingles, and when they get the time or need a little extra money, they split up a few cypress logs into shingles and

**BEST FOR "ALL
OUT-DOORS" CYPRESS**

carry them to a lumber merchant in the nearest town. Consequently, the quantity that is available in the market varies, as no merchant has any great or steady supply of rived shingles and has to accumulate them by degrees and store them, in order to be able to fill any large order. Being hand-rived, these shingles cost about twice as much as the machine-sawn shingles, but they are well worth the extra outlay if one desires a house that is beautiful, individual and durable. The sawn shingle, unless oiled or stained in the beginning, is apt to get a dingy, weather-beaten look under the action of sun and rain and to require renewing early and

CYPRESS **STOPS PROPERTY DEPRECIATION**

often. But the rived shingle has exactly the surface of the growing tree from which the bark has been stripped; or, to be more exact, it shows the split surface of a tree trunk from which a bough has been torn, leaving the wood exposed. This surface, while full of irregularities, preserves the smooth natural fiber of the tree, and this takes on a beautiful color quality under the action of the weather, as the color of the wood ripens and shows as an undertone below the smooth silvery sheen of the surface—an effect which is entirely lost when this natural glint is covered with the “fuzz” left by the saw.

All cypress woodwork, whether interior or exterior, takes stain well; and if staining is preferred to the sulphuric acid treatment, very good effects may be gained in this way. We wish, however, to repeat the caution against using too strong a stain, as the effect is always much better if a very little color is carried on in each coat. We cannot too strongly urge the necessity of preliminary experimenting with small pieces of wood in order to gain the best color effects, and we also recommend that in finishing the woodwork of the room itself a very light color be put on at first, to be darkened if

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a deeper color is found necessary to give the desired effect. The reason for this is that a color which may be considered perfect upon a small piece of wood that is examined closely and held to the light, may prove either too strong or too weak when it is seen on the woodwork as a whole. Much of the effect depends upon the lighting of the room, and therefore it is best to go slowly and "work up" the finish of the woodwork until exactly the right effect is gained. After staining cypress woodwork it should be given either a coat of shellac or wax, or of wax alone, if the amount of wear does not necessitate shellac.

**"BUILD BUT
ONCE" — USE CYPRESS**

CYPRESS: Its Picturesque Qualities, and How to Finish It

By GUSTAV STICKLEY

(Reprint from Craftsman Magazine, Oct., 1912)

"In finishing wood there are two principal aims to be kept in mind: The protection of the surface of the wood from damp and soil, and the attainment of such color and texture as will bring the wood into harmony with its surroundings. Naturally, the method of obtaining these results varies according to the kind of wood and the effect desired.

"Until a few years ago the finishing of wood was confined almost entirely to the staining of the cheaper woods

art such colors, on the whole, as might have been given it by nature. There are many rich browns, for instance, that resemble the colors in the bark of a tree; mellow, greenish stains suggest the moss-grown trunk and colors of the foliage, while soft shades of brownish gray recall the hues produced by weathering. Thus the choice is somewhat limited, brown, green and gray, with their different shades and variations, being the only colors that can be appropriately used.

“The particular purpose for which each wood is fitted is best determined by its own peculiar qualities. Certain woods, like oak, ash, elm,

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chestnut and cypress, that have a somewhat rough texture, pronounced grain, and a certain frank, rugged look, are most suitable for public halls, galleries, theaters, libraries, living rooms and other places intended for common or general use. On the other hand, woods of a smoother texture and less defined grain—such as poplar, maple, birch and our native gum woods—are more appropriate for private rooms, bedrooms, boudoirs, parlors, where lighter and daintier furnishings are used.

“Among the woods which lend themselves especially to decorative use is the cypress. There are several species of

CYPRESS STOPS PROPERTY DEPRECIATION

this tree, both in this country and abroad. The common or Oriental cypress of southern Europe and western Asia is remarkable for the great age it attains and the durability of its timber, which is said to be almost imperishable. Horace Smith, in his "Gayeties and Graveties," remarks:

" 'The gates of St. Peter's Church at Rome, made of this wood, had lasted from the time of Constantine, eleven hundred years, as fresh as new, when Pope Eugenius IV ordered gates of brass in their stead. Some will have it that the wood gophir, of which Noah's ark was made, was cypress.'

"Another Oriental variety

THE WOOD THAT LASTS CYPRESS

is the funeral cypress of China, which grows with pendulous branches like the weeping willow.

“In this country we have the Monterey cypress of California, which attains a height of 150 feet with a trunk only 9 feet in circumference. This tree is one of the most rapid-growing of the conifers. Then there is Alaska cypress or yellow cedar; Lawson’s cypress of northern California; the evergreen cypress, or as it is sometimes called, white cedar, which is found in the eastern part of the United States; the Virginia cypress, called also swamp, deciduous or bald cypress, of our southern states, and many others.

CYPRESS T H E W O O D E T E R N A L

“Our native cypress is plentiful, easily obtained and not expensive, lending itself readily to color in any of the varying tones of brown, gray or green. It is especially suited to interiors where a bold, decorative effect is wanted in the woodwork, for its somewhat coarse texture and definite markings give it a certain distinction and artistic quality that is very striking. It is a wood of much individuality, the irregularities of its grain being full of suggestive charm. For this reason it will be found particularly pleasing in bungalows, country clubs or other public rooms where the woodwork is an important

factor in the decorative scheme.

"There are several different ways in which cypress may be treated, the most distinctly ornamental and even brilliant result being that obtained by the Sugi process—an American adaptation of a Japanese method which has been introduced and developed in this country by John S. Bradstreet of Minneapolis. Mr. Bradstreet, who is a landscape architect, builder, decorator and curio seeker, has traveled and lived much in Japan, and has contributed a great deal to the awakening of American interest in the wisdom and beauty of Japanese methods of house and garden

**CYPRESS SPECIFY IT
INSIST ON IT**

planning and the picturesque use of local materials.

“Readers of THE CRAFTSMAN will recall the account and illustrations of this Sugi finish (on cypress) which appeared in the issue of May, 1912. By this process the wood is first charred with the flame from a gasoline torch and then brushed out with a wire brush, leaving the grain raised and the surface darkened to rich brown tones. (Write Southern Cypress Manufacturers’ Association, New Orleans, for Vol. 26, ‘Cypress Pocket Library’—all about the ‘Sugi’ finish *and how to do it at home.*)

“In some cases, however, an effect is desired in cypress

"BUILD BUT CYPRESS ONCE" — USE

which, while brilliant to a certain extent, will not be quite so pronounced as the Sugi finish, and it was in trying to get such a result that we hit upon the expedient of using sulphuric acid.

"In this method, the acid is diluted and applied directly to the surface of the wood. Commercial sulphuric acid should be used rather than the chemically pure, as the first is much cheaper and is quite as good for this purpose. The amount of dilution depends largely upon the temperature in which the work is done, conditions being best when the thermometer registers seventy degrees or more. With this temperature, ten parts of

CYPRESS **STOPS PROPERTY** **DEPRECIATION**

water should be used to one part of acid, and if the temperature is eighty degrees, more than ten parts of water will be required. The higher the temperature, the more water is needed, up to a certain point.

“In any case, the person using this method will have to experiment a little first on small pieces of wood, to discover the proportions that will produce the best results. The pieces should be allowed to dry twenty-four hours, so that the final color may be rightly judged. Of course, in the case of interior woodwork, it is possible to keep the room at exactly the right temperature by means of artificial

THE WOOD ETERNAL CYPRESS

heat, but when exterior wood-work or shingles are given the sulphuric acid treatment it is most important to take into consideration the temperature and state of the weather. Exposure to the direct rays of the sun darkens the wood so swiftly that a much weaker solution is required than when the work is done in the shade.

“While experience is not necessary in using this process, it should be done only by a careful, capable person, as the acid is poisonous and great care must be taken in handling it. It should be carried only in stone or glassware, care being taken not to breathe the fumes or get the acid on face, hands or clothing.

CYPRESS THE WOOD THAT LASTS

“When the acid and water are mixed the former will cause the water to heat and bubble. The mixture should not be applied until it cools, for if some of it is applied warm and some cool it will color the woodwork differently. The darkening process should be watched, and if some parts of the woodwork seem to be getting too dark, a little Craftsman Lustre or oil should be applied, either with a cloth or a brush, as the oil will stop the action of the acid. A white hog's-bristle brush should be used for applying the acid, as there is more or less fat in these bristles; any other kind of brush would be eaten up within a short time.

After using, the brush should be thoroughly washed in clear water, otherwise the acid would gradually destroy it. If, when the cypress is dry, it is found to have a slightly reddish tinge which would prove inharmonious with the color scheme of the room, the wood can be given a coat of Lustre in which a little ultramarine blue has been mixed. This will change the reddish tone to gray. If a brown shade is preferred, asphaltum varnish may be added to the Lustre.

“This coat should be allowed to dry forty-eight hours or more, and the wood sanded lightly with No. 00 sandpaper. A coat of clear Lustre can

CYPRESS BEST FOR "ALL OUT-DOORS"

then be applied with a cloth, rubbing the Lustre well into the pores of the wood.

“If neither the Sugi nor the sulphuric acid finish is desired, the cypress may be stained with a coat of carbolineum. This should be brushed on evenly and will give the wood a soft, mellow brown color, bringing out a slight greenish tone that is particularly pleasing. After this coat has dried a couple of days, a coat of Craftsman Lustre can be applied, using the clear Lustre if the carbolineum stain was dark enough, and brown or green Lustre if a deeper or more greenish brown is desired.”

**"BUILD BUT CYPRESS
ONCE"—USE**

Whether planning a Bungalow, a Mansion, a Farm, a Sleeping-porch, or just a simple Fence—remember—"If you build of CYPRESS you build but once."

We want you to investigate the merits of CYPRESS for use in hundreds of ways and believe we can give you real help. Will you write our All-Round Helps Dep't?

**Southern CYPRESS Mfrs.
Assn., New Orleans, La. and
Jacksonville, Florida**

*Insist on Trade-Marked CYPRESS from your
local lumber dealer. If he hasn't it let us know.*

ANOTHER SPECIAL NOTE:

About Another Special Finish

AN EFFECT WHICH CAN BE OBTAINED UPON "SUGI FINISHED" CYPRESS, AND WHICH WILL BE PARTICULARLY PLEASING TO SOME TASTES, IS SECURED MERELY BY AN APPLICATION OF MURIATIC ACID TO THE BOARD *AFTER IT IS BURNED AND BRUSHED OUT, BUT BEFORE WAX OR ANY Other FINISH IS APPLIED.* THE EFFECT OF THIS IS TO TAKE AWAY, TO A LARGE EXTENT, THE CONTRAST OF COLOR *and* IT ALSO GIVES A VERY PLEASING GRAY TONE.

AN IMPORTANT FACT:

A FEW WORDS EXPLAINING WHY "ALL-HEART" CYPRESS SHOULD BE SPECIFIED FOR NON-ROT USAGES.

All trees, in terms of lumber contents, consist of two parts, the "heart" material, or mature wood constituting the inner bulk of the trunk, and the series of rings (of solid wood—not bark) known as "sap," which vary in thickness from one inch to four inches, or thicker, and which are the newer growth, and which, in due course, will become an addition to the "heart" wood, and be, in turn, replaced by still newer "sap" growth beneath the bark of the expanding trunk.

The "heart-wood" of almost all trees is somewhat darker in color than the "sap-wood," and in most species—is easily distinguishable.

"Sap" cypress, like the sap part of all other woods, is less solid and compact and therefore is not recommended for special endurance against decay. It has not yet enough of the singular essence known as "cypressene" to adequately protect it from decay germs, and in this respect is not conspicuously more enduring than the corresponding part of other trees. The "HEART-WOOD" OF THE CYPRESS is, however, thoroughly impregnated ("vaccinated," as it were), and it is the ALL-HEART WOOD OF CYPRESS that has made its historic fame as "the wood eternal."

It is obvious that for numerous uses the sap material is just as good as the heart, but for those uses where resistance to decay is a vital factor it is essential that "ALL-HEART" be specified. Best let your contractor or dealer know that you know this, when ordering.

CYPRESS

"THE WOOD ETERNAL"



**BUY YOUR CYPRESS
OF YOUR OWN LUMBERMAN**

HE HAS IT — OR WILL GET IT

**INSIST ON GENUINE
"TIDEWATER" CYPRESS.**

**IDENTIFY IT BY THIS TRADE-
MARK IN THE END OF EVERY
BOARD AND ON EVERY BUNDLE**



TRADE MARK REG. U.S. PAT. OFFICE